

[4910-13-U]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39 [66 FR 20904 4/26/2001]

[Docket No. 98-NM-139-AD; Amendment 39-12188; AD 2001-08-11]

RIN 2120-AA64

Airworthiness Directives; Aerospatiale Model ATR42-200, -300, and -320 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment supersedes an existing airworthiness directive (AD), applicable to all Aerospatiale Model ATR42-300 and -320 series airplanes, that currently requires repetitive ultrasonic inspections to detect cracking of certain lugs on the main landing gear (MLG), replacement of cracked lugs with new or serviceable parts, and a follow-on inspection; and provides for an optional terminating action for the repetitive inspections. This amendment removes that terminating action and requires new repetitive inspections of the rubber sealant to detect shearing, and corrective action, if necessary. This action also requires new one-time visual and fluorescent penetrant inspections to detect discrepancies of certain lugs, and refurbishment of the MLG barrel and swing lever assemblies, which terminates the requirements of this AD. This action also revises the applicability of the existing AD. This amendment is prompted by issuance of mandatory continuing airworthiness information by a foreign civil airworthiness authority. The actions specified by this AD are intended to prevent discrepancies of the MLG barrel lower lugs, which could result in reduced structural integrity and possible collapse of the MLG.

DATES: Effective May 31, 2001.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of May 31, 2001.

The incorporation by reference of certain other publications listed in the regulations was approved previously by the Director of the Federal Register as of March 7, 1997 (62 FR 7665, February 20, 1997).

ADDRESSES: The service information referenced in this AD may be obtained from Aerospatiale, 316 Route de Bayonne, 31060 Toulouse, Cedex 03, France. This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Norman B. Martenson, Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) by superseding AD 97-26-19, amendment 39-10262 (62 FR 66980, December 23, 1997), which is applicable to all Aerospatiale Model ATR42-300 and -320 series airplanes, was published in the **Federal Register** on November 28, 2000 (65 FR 70815). That action proposed to remove the terminating action and require new repetitive inspections of the rubber sealant to detect shearing, and corrective action if necessary. That action also proposed to require new one-time visual and fluorescent penetrant inspections to detect discrepancies of certain lugs and refurbishment of the main landing gear (MLG) barrel and swing lever assemblies, which would terminate the requirements of the proposed AD. That action also proposed to revise the applicability of the existing AD to include Model ATR42-200 series airplanes.

Comments

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the single comment received.

Request to Extend Compliance Time for Refurbishment

The commenter (the manufacturer of the subject MLG legs) requests an extension of the compliance time to refurbish the MLG legs, as specified in paragraphs (g) and (h) of the proposed AD. The commenter reports that those proposed compliance times have already passed for many of the affected airplanes. Approximately 70 MLG legs have not been refurbished. For certain airplanes, the proposed AD would require the MLG legs to be refurbished within the proposed 60-day grace period; for other airplanes, no grace period was provided. Furthermore, the refurbishment must be done by third-party maintenance vendors. They estimate that, based on current shop schedules and the availability of spare parts, it would take 36 months after December 2000 to refurbish all affected MLG legs in the U.S.

The FAA concurs with the request to extend the compliance times to refurbish the MLG legs. In developing an appropriate compliance time, the FAA considered the safety implications, parts availability, and maintenance schedules for timely accomplishment of the refurbishment. In consideration of these factors, the FAA has determined that the revised compliance times (24 months for airplanes modified in accordance with Messier-Dowty Service Bulletin 631-32-133; 42 months for unmodified airplanes) represent an appropriate interval in which the refurbishment can be accomplished in a timely manner within the fleet and an adequate level of safety can be maintained. Paragraphs (g) and (h) have been revised accordingly in this final rule.

Clarification of Compliance Time for Sealant Inspection

The FAA noted some incongruous compliance times specified in paragraph (e) of the proposed AD. Proposed paragraph (e)(1) referred to a repetitive interval of 300 landings, and proposed paragraph (e)(2) referred to immediate compliance for the corrective action. Both paragraphs conflict with the prior reference in paragraph (e) to a 400-flight-hour repetitive interval. Paragraphs (e), (e)(1), and (e)(2) have been revised in this final rule to eliminate the conflicting requirements.

Conclusion

After careful review of the available data, including the comment noted above, the FAA has determined that air safety and the public interest require the adoption of the rule with the changes previously described. The FAA has determined that these changes will neither increase the economic burden on any operator nor increase the scope of the AD.

Cost Impact

There are approximately 84 airplanes of U.S. registry that will be affected by this AD.

The inspection that is currently required by AD 97-26-19, and retained in this AD, takes approximately 2 work hours per airplane to accomplish, at an average labor rate of \$60 per work hour. Based on these figures, the cost impact of the currently required actions is estimated to be \$120 per airplane, per inspection cycle.

The new inspections and refurbishment required by this AD will take approximately 29 work hours per airplane, at an average labor rate of \$60 per work hour. Required parts will cost approximately \$4,822 per airplane. Based on these figures, the cost impact of the new requirements of this AD on U.S. operators is estimated to be \$551,208, or \$6,562 per airplane.

The cost impact figures discussed above are based on assumptions that no operator has yet accomplished any of the current or proposed requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted.

Regulatory Impact

The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules

Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption "ADDRESSES."

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. Section 39.13 is amended by removing amendment 39-10262 (62 FR 66980, December 23, 1997), and by adding a new airworthiness directive (AD), amendment 39-12188, to read as follows:

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation
**Federal Aviation
Administration**

We post ADs on the internet at "av-info.faa.gov"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

2001-08-11 AEROSPATIALE: Amendment 39-12188. Docket 98-NM-139-AD. Supersedes AD 97-26-19, Amendment 39-10262.

Applicability: Model ATR42-200, -300, and -320 series airplanes; certificated in any category; except airplanes that have been refurbished in accordance with Messier-Dowty Service Bulletin 631-32-145, dated February 16, 1998.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (k)(1) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To detect and correct discrepancies of the main landing gear (MLG) barrel lower lugs, which could result in reduced structural integrity and possible collapse of the MLG, accomplish the following:

Ultrasonic Inspection

(a) For airplanes on which the actions specified by Messier-Dowty Service Bulletin 631-32-133, dated February 24, 1997, as revised by Change Notice No. 1, dated March 18, 1997, have not been accomplished prior to the effective date of this AD: Perform an ultrasonic inspection to detect fatigue cracks of the lower lugs of the barrel of the MLG, in accordance with Messier-Dowty Service Bulletin 631-32-132, dated January 21, 1997, at the applicable time specified in paragraph (a)(1), (a)(2), (a)(3), or (a)(4) of this AD.

(1) For Model ATR42-300 and -320 series airplanes: Inspect within 2 years after the last overhaul or repair of the lower lugs of the barrel of the MLG; or within 60 days after March 7, 1997 (the effective date of AD 97-04-09, amendment 39-9933); whichever occurs later.

(2) For Model ATR42-300 and -320 series airplanes: Inspect within 5 years after the installation of a new MLG barrel assembly, or within 60 days after January 7, 1998 (the effective date of AD 97-26-19, amendment 39-10262); whichever occurs later.

(3) For Model ATR42-200 series airplanes: Inspect within 2 years after the last overhaul or repair of the lower lugs of the barrel of the MLG, or within 60 days after the effective date of this AD, whichever occurs later.

(4) For Model ATR42-200 series airplanes: Inspect within 5 years after the installation of a new MLG barrel assembly, or within 60 days after the effective date of this AD, whichever occurs later.

(b) If, during any inspection specified in paragraph (a) of this AD, no ultrasonic echo (as described in Messier-Dowty Service Bulletin 631-32-133, dated February 24, 1997, as revised by Change Notice No. 1, dated March 18, 1997) is detected, or if the echo is less than 20%: Except as required by paragraph (c) of this AD, repeat the ultrasonic inspection thereafter at intervals not to exceed 900 landings.

(c) For airplanes that are subject to the repetitive inspection requirements of paragraph (b) of this AD: As of the effective date of this AD, repeat the inspection, as specified by Table 1 of this AD, until the requirements of paragraph (f) of this AD are accomplished. Table 1 is as follows:

Table 1: Repetitive Interval

If the first ultrasonic inspection specified by paragraph (a) of this AD was done -	Then repeat the ultrasonic inspection -
At least 24 months, and less than 42 months, before the effective date of this AD	Within 500 landings after the first ultrasonic inspection, or within 60 days after the effective date of this AD, whichever occurs later; and thereafter at intervals not to exceed 500 landings.
Less than 24 months before the effective date of this AD, or at any time on or after the effective date of this AD	At intervals not to exceed 900 landings, for a period not to exceed 24 months after the first ultrasonic inspection of (a) of this AD; and thereafter at intervals not to exceed 500 landings.

(d) If, during any inspection specified in paragraph (a) of this AD, the echo is greater than or equal to 20%: Prior to further flight, replace the MLG barrel assembly with a new or serviceable MLG barrel assembly, in accordance with Messier-Dowty Service Bulletin 631-32-132, dated January 21, 1997.

(1) If the damaged barrel assembly is replaced with an overhauled or repaired assembly, within 2 years after installation of that overhauled or repaired part, accomplish the actions specified in paragraph (a) of this AD.

(2) If the damaged barrel assembly is replaced with a new barrel assembly, within 5 years after installation of that new part, accomplish the actions specified in paragraph (a) of this AD.

Inspection of Sealant

(e) For airplanes on which the actions specified by Messier-Dowty Service Bulletin 631-32-133, dated February 24, 1997, as revised by Change Notice No. 1, dated March 18, 1997, have been accomplished prior to the effective date of this AD: Within 400 flight hours after the effective date of this AD, perform a detailed visual inspection to detect discrepancies (including shearing or separation) of the rubber sealant between the bushings and the MLG barrel lower lugs, and between the bushing and the swinging lever lug, in accordance with Messier-Dowty Service Bulletin 631-32-144, dated January 19, 1998.

Note 2: For the purposes of this AD, a detailed visual inspection is defined as: “An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required.”

(1) If no discrepancy is detected, repeat the detailed visual inspection specified in paragraph (e) of this AD thereafter at intervals not to exceed 400 flight hours, until accomplishment of the actions required by paragraph (f) of this AD.

(2) If any discrepancy is detected, prior to further flight, repeat the ultrasonic inspection and all applicable corrective actions specified by paragraphs (a), (b), and (d) of this AD.

Inspections and MLG Refurbishment

(f) For all airplanes: At the applicable time specified by paragraph (g) or (h) of this AD, accomplish the actions required by paragraphs (f)(1) and (f)(2) of this AD, in accordance with Messier-Dowty Service Bulletin 631-32-145, dated February 16, 1998, or Revision 1, dated May 31, 1999. Accomplishment of the inspections and refurbishment required by this paragraph constitutes terminating action for the requirements of this AD.

(1) Perform a one-time detailed visual inspection and a one-time fluorescent penetrant inspection to detect discrepancies (cracks, corrosion, and material defects) of the barrel lower lugs (outboard and inboard).

(i) If no discrepancy is found, prior to further flight, refurbish the lugs in accordance with the service bulletin.

(ii) If any discrepancy is found, prior to further flight, refurbish the lugs in accordance with the service bulletin and repeat the detailed visual inspection and fluorescent penetrant inspection. If any discrepancy remains, prior to further flight, do the actions specified by either paragraph (f)(1)(ii)(A) or (f)(1)(ii)(B) of this AD.

(A) Replace the damaged MLG barrel with a new or reconditioned barrel.

(B) Repair in accordance with a method approved by either the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate; or the Direction Générale de l'Aviation Civile (DGAC) (or its delegated agent).

(2) Refurbish the MLG (including restoring the protective treatments, installing new bushings, and installing new lubrication points of the MLG barrel and swinging lever assemblies).

Compliance Times for Inspections and Refurbishment

(g) For airplanes on which the actions specified by Messier-Dowty Service Bulletin 631-32-133, dated February 24, 1997, have not been accomplished prior to the effective date of this AD: Do the actions required by paragraph (f) of this AD within 42 months after the effective date of this AD.

(h) For airplanes on which the actions specified by Messier-Dowty Service Bulletin 631-32-133, dated February 24, 1997, have been accomplished prior the effective date of this AD: Do the actions required by paragraph (f) of this AD within 24 months after the effective date of this AD.

Reporting Requirement

(i) At the applicable time specified by paragraph (i)(1) or (i)(2) of this AD, submit a report of the results (both positive and negative findings) of the initial inspections required by paragraphs (a) and (e) of this AD to Messier-Dowty, BP 10-78142 Vélizy Cedex, France. Information collection requirements contained in this regulation have been approved by the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.) and have been assigned OMB Control Number 2120-0056.

(1) For airplanes on which the inspections are accomplished after the effective date of this AD: Submit a report of each inspection within 10 days after performing the applicable inspection.

(2) For airplanes on which the inspections have been accomplished prior to the effective date of this AD: Submit the report within 10 days after the effective date of this AD.

Spares

(j) As of the effective date of this AD, no person shall install a bushing, part number D66349, on the MLG barrel and swinging lever assemblies on any airplane.

Alternative Methods of Compliance

(k) (1) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM-116. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, International Branch, ANM-116.

(2) Alternative methods of compliance approved previously in accordance with AD 97-26-19, amendment 39-10262, are approved as alternative methods of compliance with the applicable requirements of this AD.

Note 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM-116.

Special Flight Permits

(l) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(m) Except as required by paragraph (f)(1)(ii)(B) of this AD: The actions must be done in accordance with Messier-Dowty Service Bulletin 631-32-132, dated January 21, 1997; Messier-Dowty Service Bulletin 631-32-144, dated January 19, 1998; Messier-Dowty Service Bulletin 631-32-145, dated February 16, 1998; and Messier-Dowty Service Bulletin 631-32-145, Revision 1, dated May 31, 1999; as applicable. Messier-Dowty Service Bulletin 631-32-145, Revision 1, dated May 31, 1999, contains the following list of effective pages:

Page Number	Revision Level Shown on Page	Date Shown on Page
1, 2, 9, 10	1	May 31, 1999
3-8, 11-46	Original	February 16, 1998

(1) The incorporation by reference of Messier-Dowty Service Bulletin 631-32-144, dated January 19, 1998; Messier-Dowty Service Bulletin 631-32-145, dated February 16, 1998; and Messier-Dowty Service Bulletin 631-32-145, Revision 1, dated May 31, 1999; is approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

(2) The incorporation by reference of Messier-Dowty Service Bulletin 631-32-132, dated January 21, 1997, was approved previously by the Director of the Federal Register as of March 7, 1997 (62 FR 7665, February 20, 1997).

(3) Copies of any of these service bulletins may be obtained from Aerospatiale, 316 Route de Bayonne, 31060 Toulouse, Cedex 03, France. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Note 4: The subject of this AD is addressed in French airworthiness directive 1996-294(B) R4, dated March 10, 1999.

Effective Date

(n) This amendment becomes effective on May 31, 2001.

FOR FURTHER INFORMATION CONTACT: Norman B. Martenson, Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

Issued in Renton, Washington, on April 16, 2001.

Donald L. Riggan, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.